

Serial No.: 10/552,857
Response to Office Action mailed: August 12, 2009
Amendment Dated: October 8, 2009

REMARKS/ARGUMENTS

This is in response to the restriction requirement mailed August 12, 2009 for the above-captioned application. An extension of time sufficient to make this paper timely is requested and the appropriate fee is enclosed.

Typographical errors in claims 64, 65, 71 and 75 have been corrected.

Claim 70 has been amended to recite all of the language from claim 62 so address the objection from the Examiner.

The Examiner divided the claims into twelve groups. Applicants hereby Group II, Claims 62-76 (in part) for prosecution in this application. This group relates to nucleic acid constructs encoding Seq ID Nos. 2 and 10, and optionally 14, and related invention. This election is made **with traverse**.

The basis for the restriction is an asserted lack of unity based on a Suzuki et al. The Examiner argues that the construct with chalcone synthase and dihydroflavonol-4-reductase disclosed in the reference is a “variant” of the instantly recited sequences. The basis for this argument is not set forth, and Applicants submit that such an argument is in error for a variety of reasons.

First of all, claims 62-64 do not recite variants in the claims. These claims state that the construct has nucleic acid portions from *Trifolium* species. The Suzuki reference relates to a different genus, i.e. *Torenia*. The Examiner has offered neither evidence nor reason why the sequences of not one, but two proteins from these genera would be similar to one another, and in fact, such similarity is lacking.

Three *Torenia hybrida* genes were identified in Suzuki et al (2000). The NCBI nucleotide sequence accession numbers for each are AB012923, AB012924, and AB012925. When an alignment of chalcone synthase sequences of the present invention is done with AB012923 (the CHS gene of Suzuki), the homology for Seq. ID No. 1 at the nucleic acid level is only about 65%, and the non-elected CHS sequence are even less similar. When the same comparison is made for the DFR/BAN sequence (Seq. ID No. 9) the identity at the nucleic acid level is only 52.5%. Based on this, plainly does not disclose anything similar to the invention of claim 62.

Furthermore, Applicants have limited claim 65 to require at least 90% sequence identity with the starting sequence. Suzuki does not disclose a polynucleotide that meets this limitation. Furthermore, the CHS protein sequences of Suzuki are at least 15% different from those recited in claim 65, while the DFR/BAN protein sequence has only 38.7% homology. Thus is it

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apparent that there is no overlap between Suzuki and the presently claimed invention and thus no basis for saying the invention lacks novelty over the reference.

For these reasons, Applicants submit that the subject matter of claim 62 and all of the sequences of 65 share unity of invention because they are derived from a common plant genus. *Trifolium*, and the art does not teach such a combination of *Trifolium* genes.

Because there is not no lack of unity between claims 62 and 65, there is no reason to restrict as between sequences for the third gene in the construct (LAR). Thus, Applicants submit that this restriction should be treated as at most a species restriction, with claim 66 being considered generic to the elected species.

Respectfully submitted,



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